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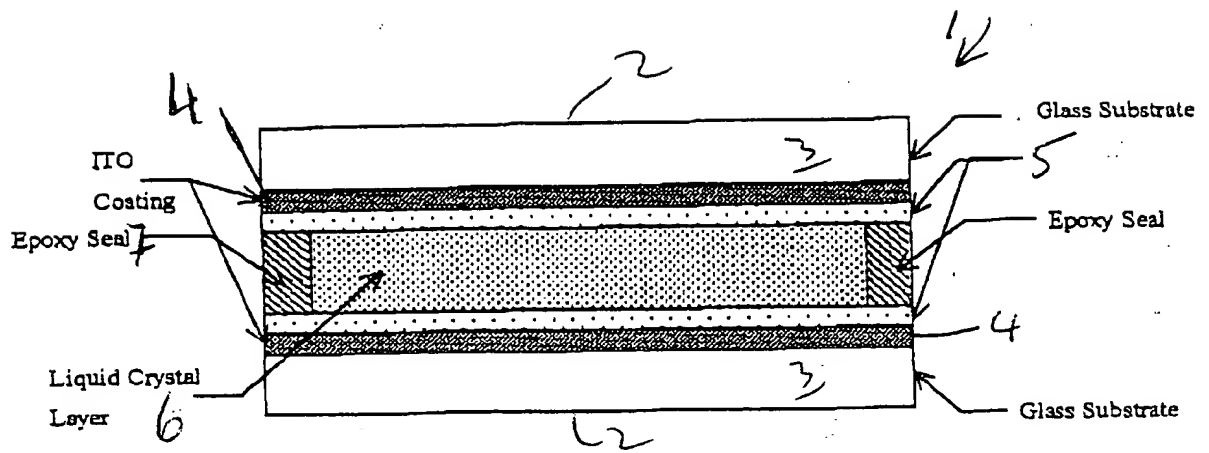


Fig. 1 Structure of passively driven liquid crystal display

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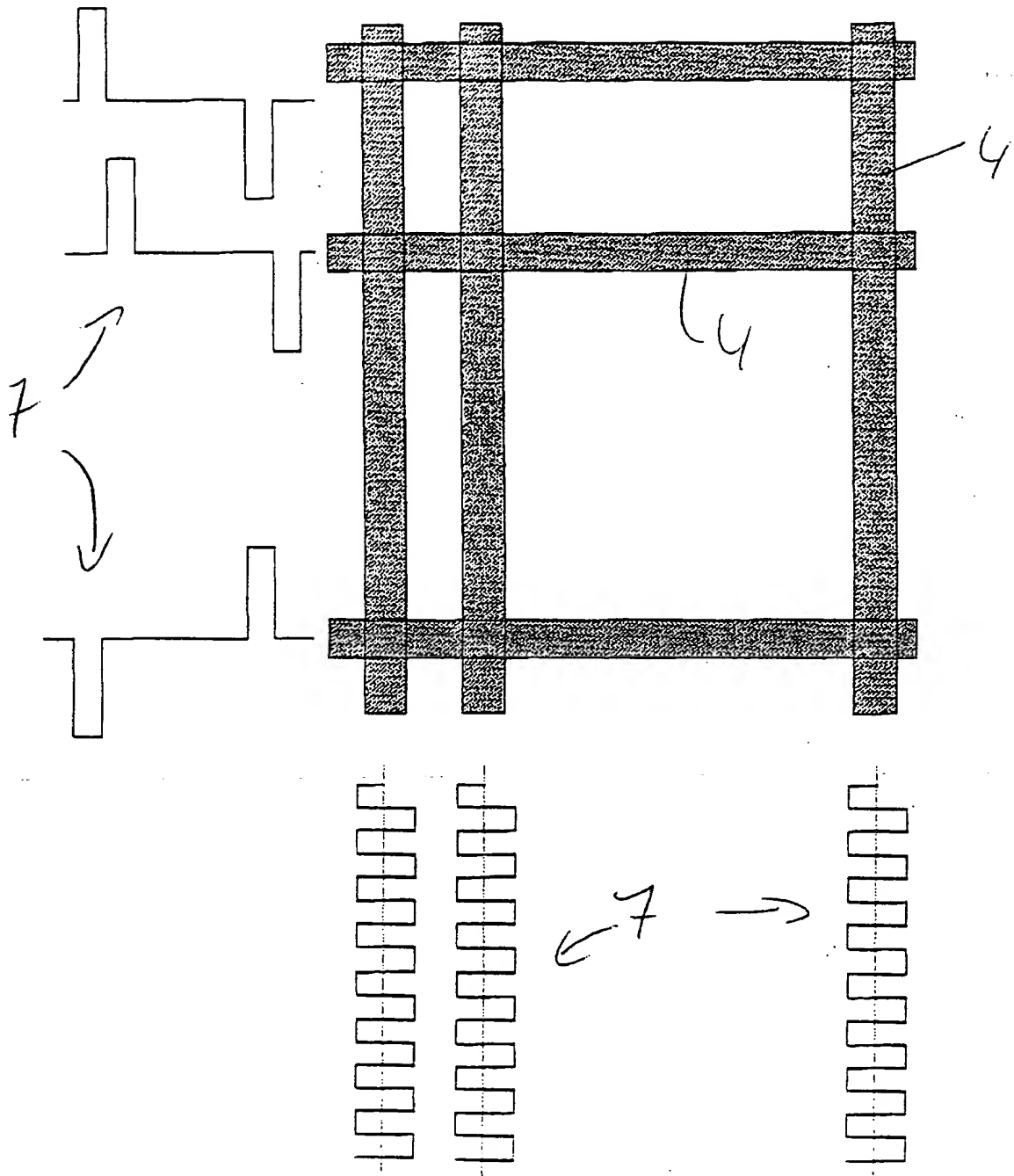


Fig. 2 Example waveform applied to the common and segment electrodes

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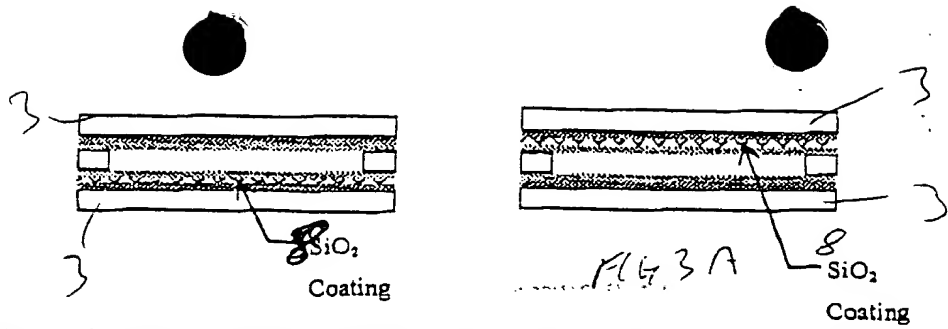


Fig. 3 Coating of silicon dioxide applied for better electrical isolation between the two ITO surfaces

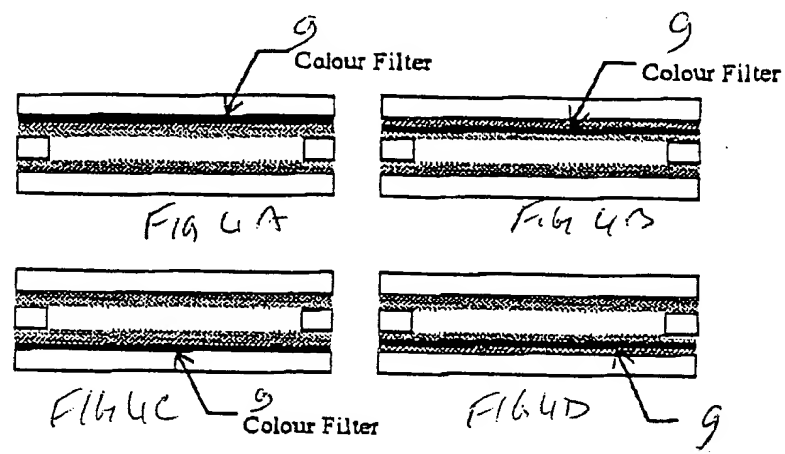


Fig. 4 Color filter material applied on/under the ITO layer

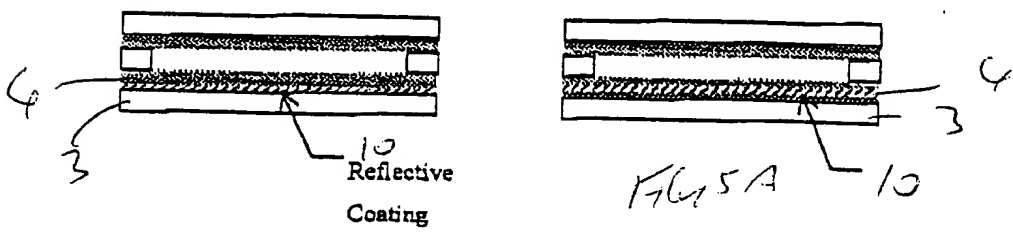


Fig. 5 reflective coating applied on/under the ITO layer of the rear substrate

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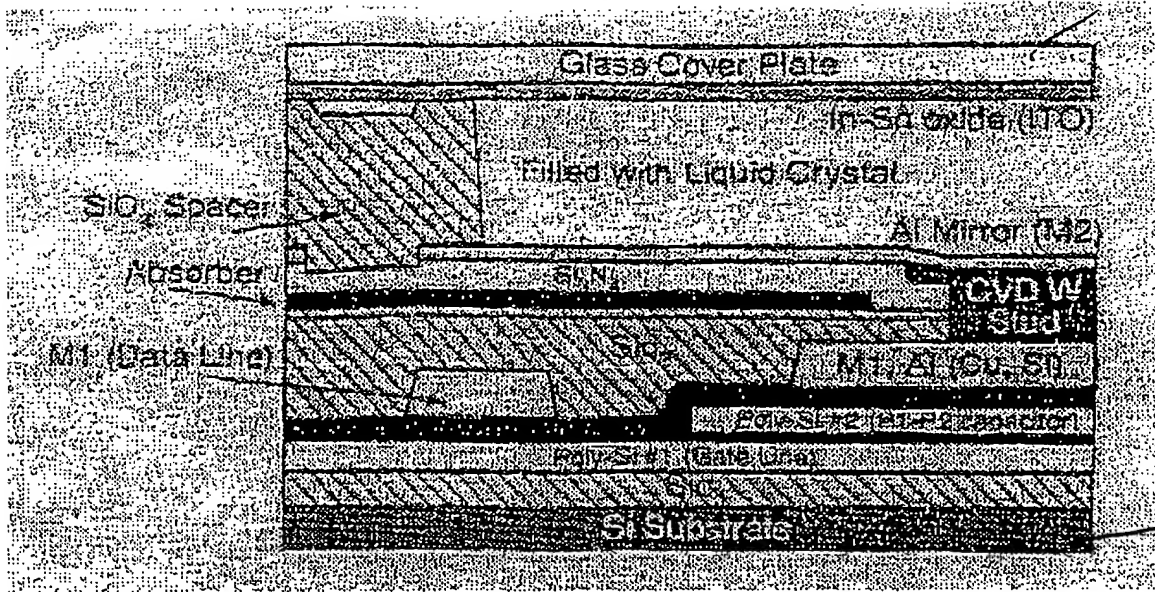


Fig. 6 Arrangement for reflective single crystal CMOS microdisplay

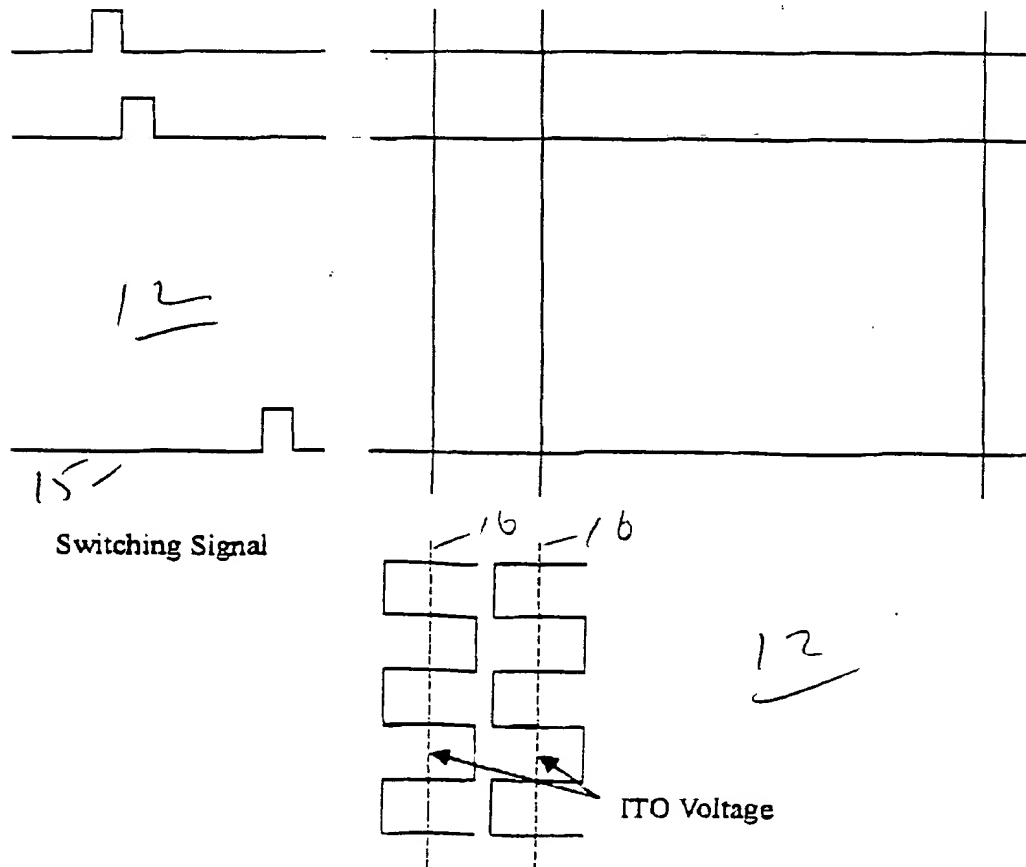


Fig. 7 Signal waveform incorporating row inversion scheme for actively driven liquid crystal display

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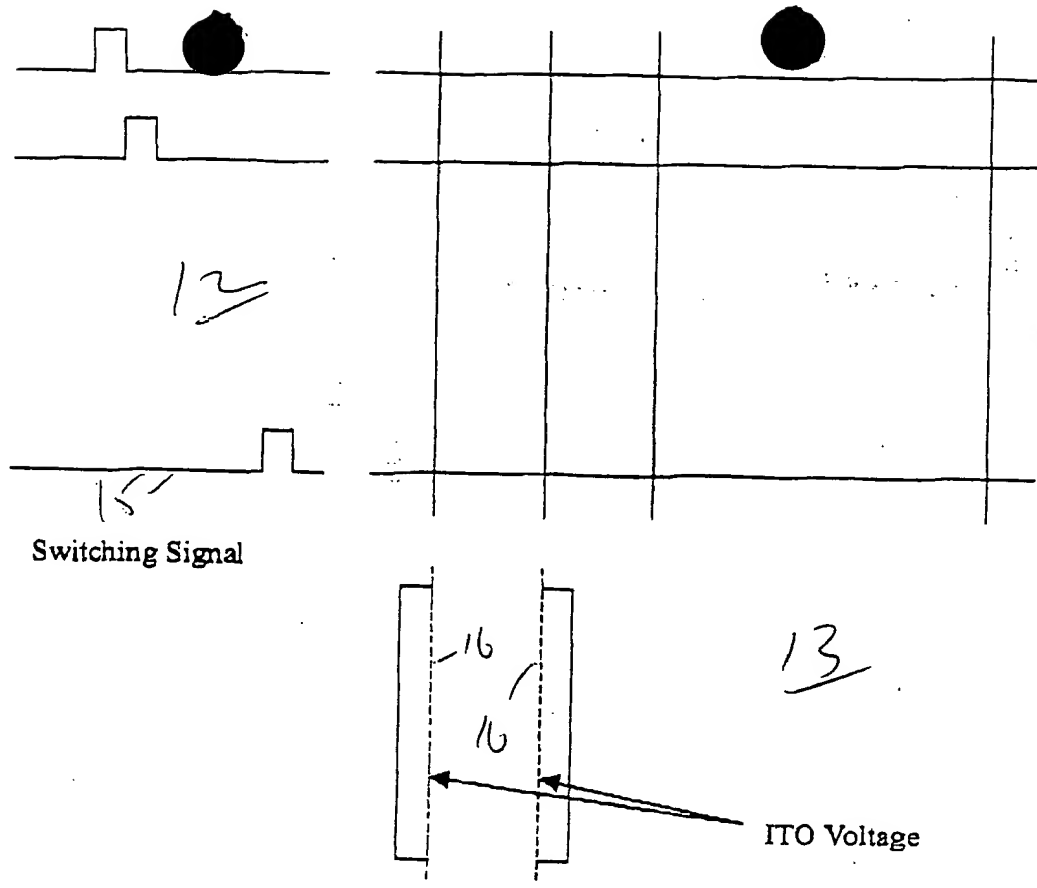


Fig. 8 Signal waveform incorporating column inversion scheme for actively driven liquid crystal display

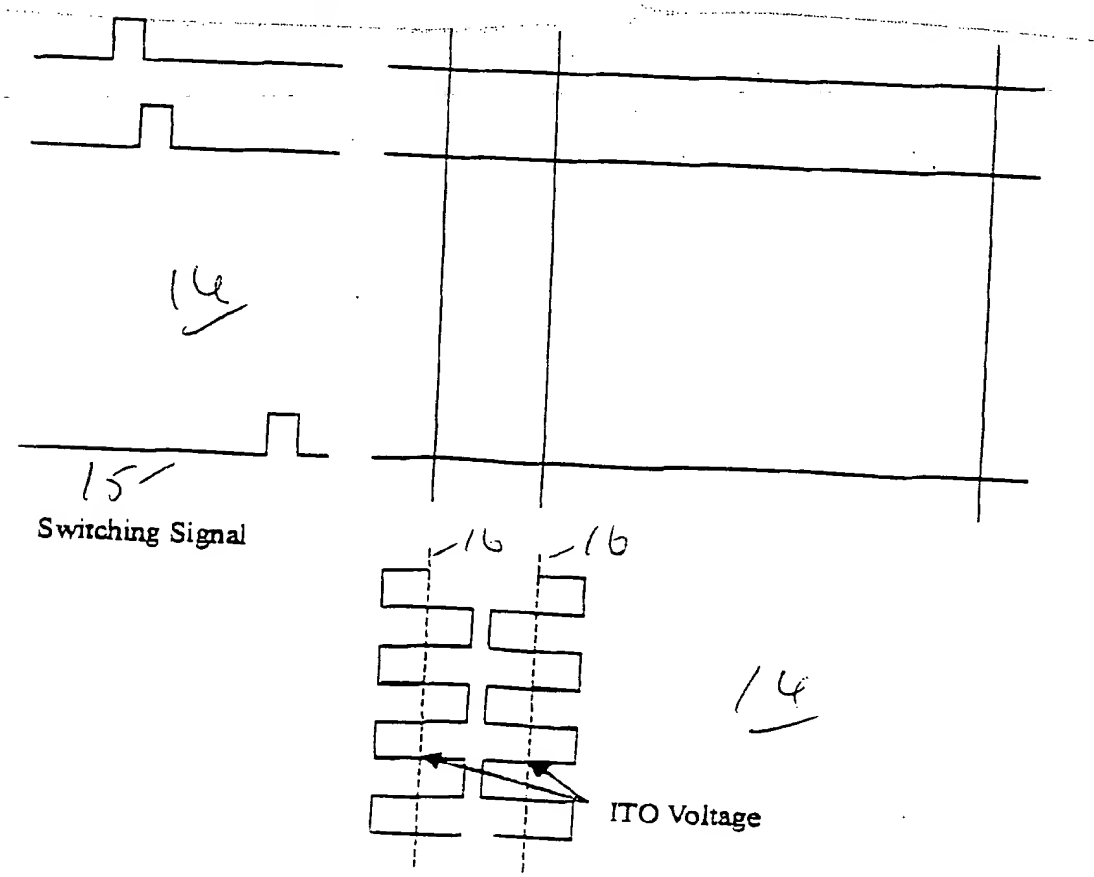


Fig. 9 Signal waveform incorporating pixel inversion scheme for actively driven liquid crystal display

+	+	+	+	+	+
-	-	-	-	-	-
+	+	+	+	+	+
-	-	-	-	-	-
+	+	+	+	+	+
-	-	-	-	-	-

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✓

-	-	-	-	-	-
+	+	+	+	+	+
-	-	-	-	-	-
+	+	+	+	+	+
-	-	-	-	-	-
+	+	+	+	+	+

17
d

[illegible][illegible]

18

[illegible]

18

Fig. 11 Polarities of resulting fields applied to pixels for two consecutive frames adopting column inversion scheme

+	-	+	-	+	-
-	+	-	+	-	+
+	-	+	-	+	-
-	+	-	+	-	+
+	-	+	-	+	-
-	+	-	+	-	+

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-	+	-	+	-	+
+	-	+	-	+	-
-	+	-	+	-	+
+	-	+	-	+	-
-	+	-	+	-	+
+	-	+	-	+	-

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[illegible]

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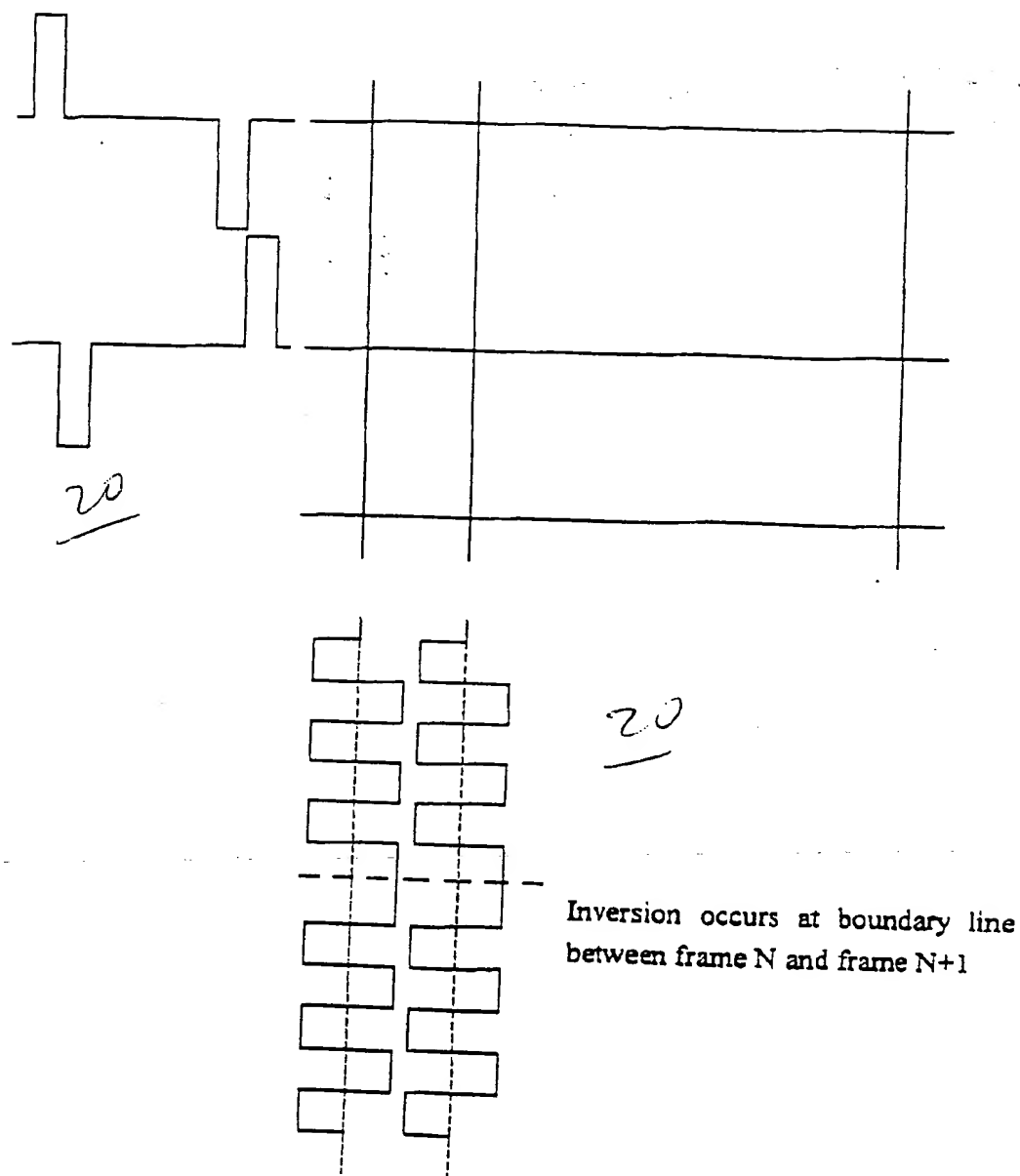
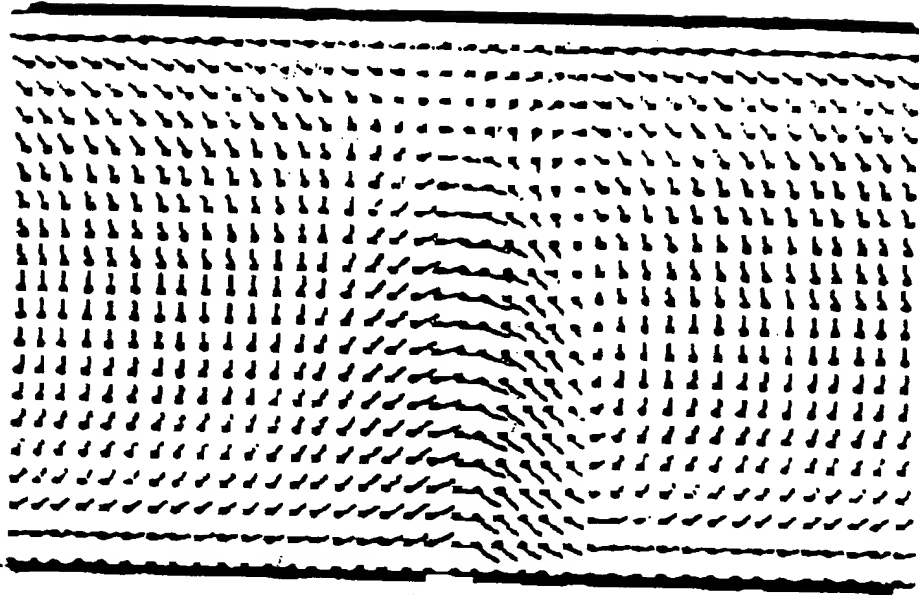


Fig. 13 Signal waveform incorporating row inversion scheme for passively driven liquid crystal display

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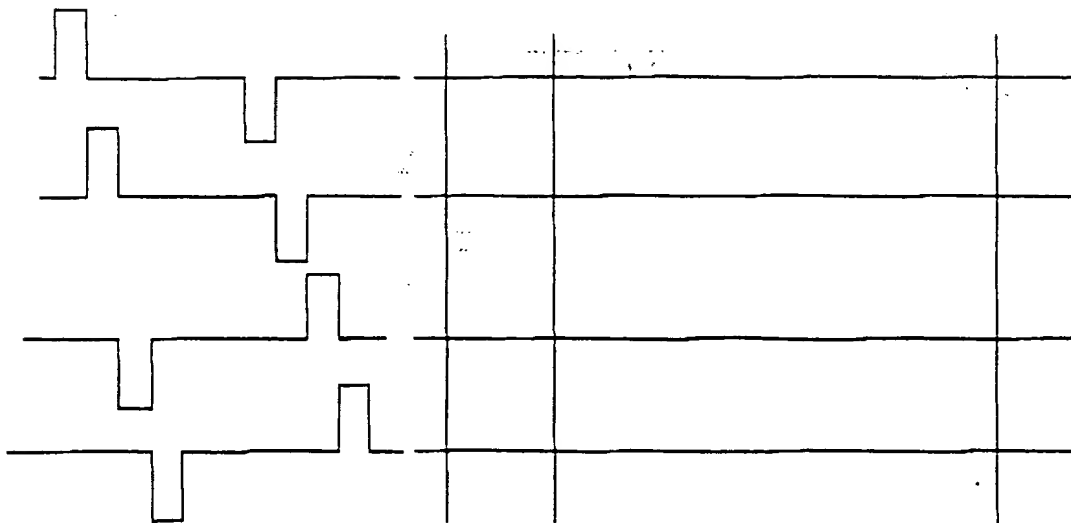


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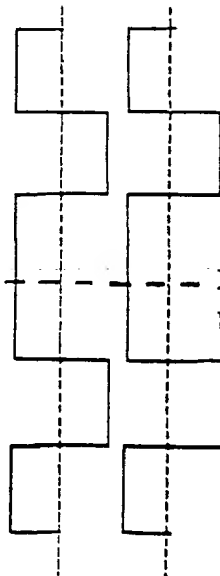
Fig. 14 2D director configuration of two pixels driven in column inversion mode

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Inversion occurs at boundary line between frame N and frame N+1

Fig. 15 Signal waveform incorporating 2-row inversion scheme for passively driven liquid crystal display

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+	+	+	+	+	+
+	+	+	+	+	+
-	-	-	-	-	-
-	-	-	-	-	-
+	+	+	+	+	+
+	+	+	+	+	+

Frame N

23

-	-	-	-	-	-
-	-	-	-	-	-
+	+	+	+	+	+
+	+	+	+	+	+
-	-	-	-	-	-
-	-	-	-	-	-

Frame N+1

23

Fig. 16 Polarities of resulting fields applied to pixels for two consecutive frames adopting 2-row inversion scheme

+	+	-	-	+	+
+	+	-	-	+	+
+	+	-	-	+	+
+	+	-	-	+	+
+	+	-	-	+	+
+	+	-	-	+	+

Frame N

24

-	-	+	+	-	-
-	-	+	+	-	-
-	-	+	+	-	-
-	-	+	+	-	-
-	-	+	+	-	-
-	-	+	+	-	-

Frame N+1

24

Fig. 17 Polarities of resulting fields applied to pixels for two consecutive frames adopting 2-column inversion scheme

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+	+	-	-	+	+
+	+	-	-	+	+
-	-	+	+	-	-
-	-	+	+	-	-
+	+	-	-	+	+
+	+	-	-	+	+

Frame N

25

-	-	+	+	-	-
-	-	+	+	-	-
+	+	-	-	+	+
+	+	-	-	+	+
-	-	+	+	-	-
-	-	+	+	-	-

Frame N+1

25

Fig. 18 Polarities of resulting fields applied to pixels for two consecutive frames adopting 2x2-pixel inversion scheme

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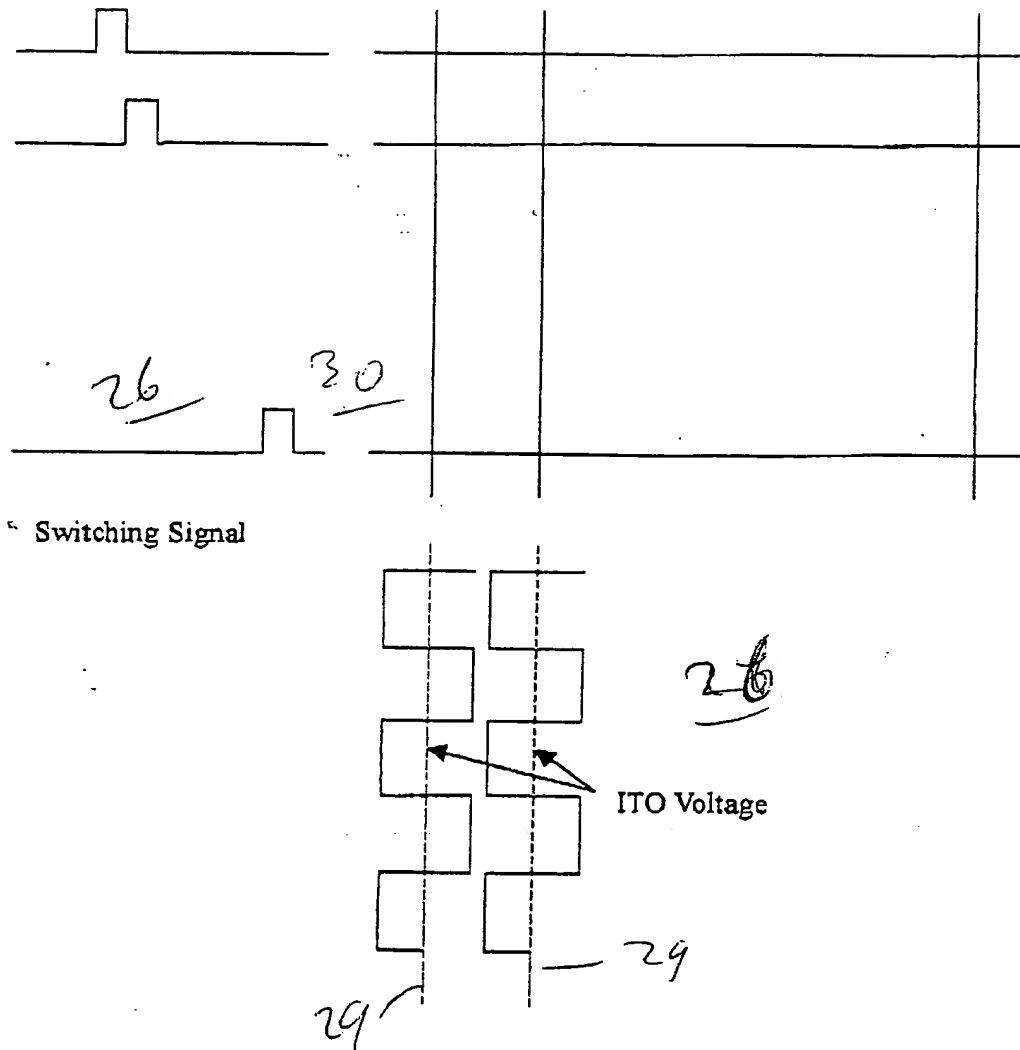


Fig. 19 Signal waveform incorporating 2-row inversion scheme for actively driven liquid crystal display

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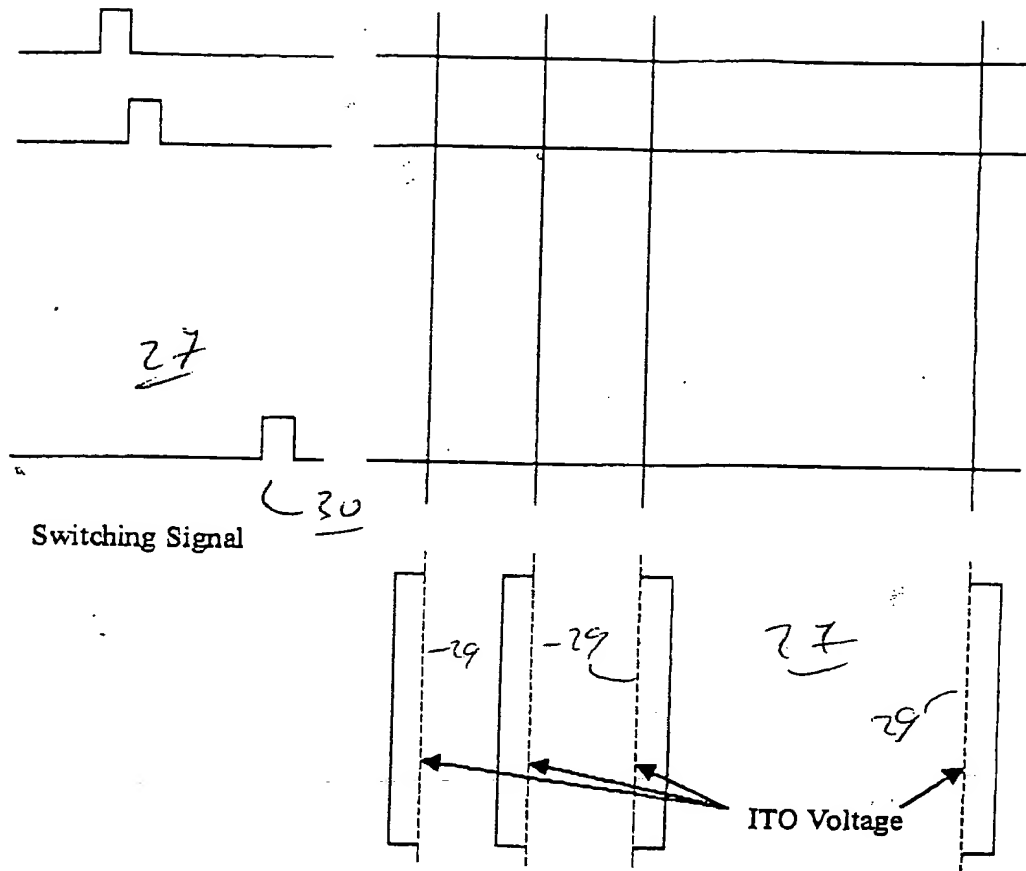


Fig. 20 Signal waveform incorporating 2-column inversion scheme for actively driven liquid crystal display

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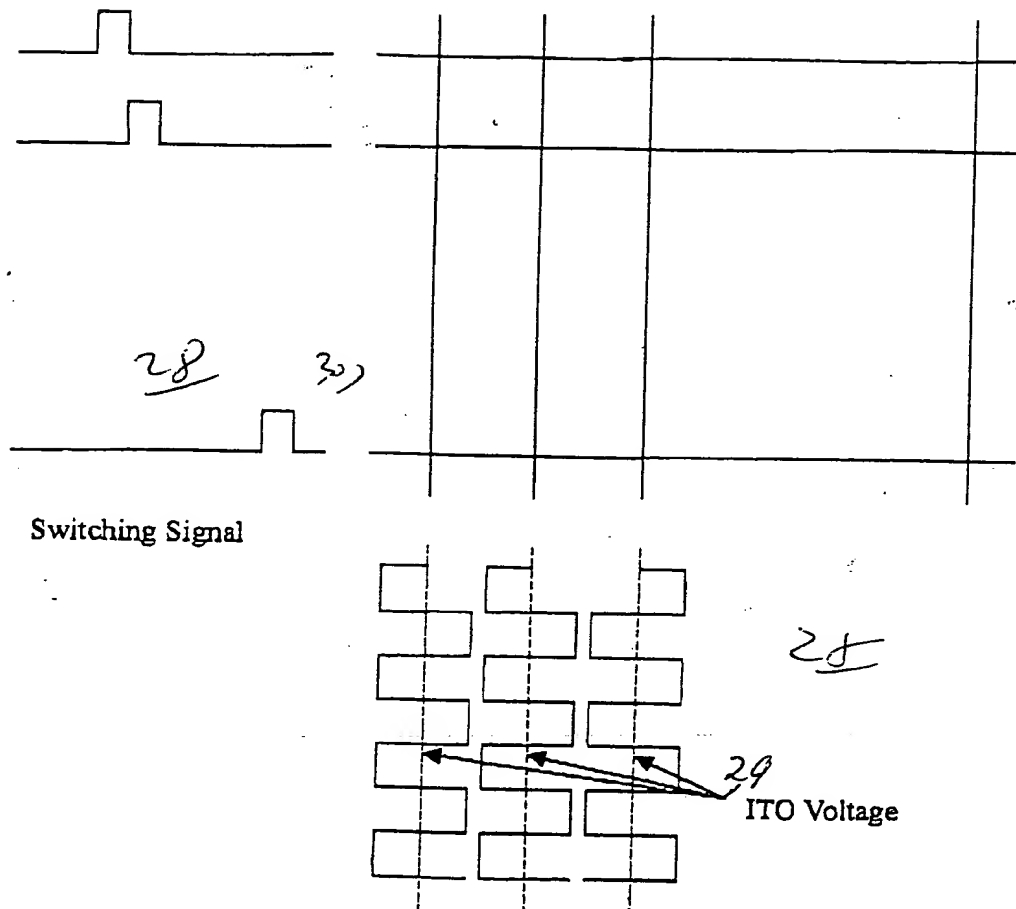


Fig. 21 Signal waveform incorporating 2x2-pixel inversion scheme for actively driven liquid crystal display